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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/759,388	01/15/2004	Yoshinori Fujiwara	MIC-43	7144

1473 7590 04/14/2006

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EXAMINER

TRAN, MICHAEL THANH

ART UNIT PAPER NUMBER

2827

DATE MAILED: 04/14/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/759,388

Applicant(s)

FUJIWARA, YOSHINORI

Examiner

Michael t. Tran

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 08 February 2006.  
2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.  
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-33 is/are pending in the application.  
4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.  
5) ☒ Claim(s) 4-33 is/are allowed.  
6) ☒ Claim(s) 1 and 2 is/are rejected.  
7) ☒ Claim(s) 3 is/are objected to.  
8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.


**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.  
10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

  
MICHAEL TRAN  
PRIMARY EXAMINER

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892)  
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)  
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.  
4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.  
5) ☐ Notice of Informal Patent Application (PTO-152)  
6) ☐ Other: \_\_\_\_\_.

## DETAILED ACTION

1. In response to the Communications dated August 31, 2005, claims 1-33 are active in this application.

### ***Claim Objections***

2. Claim 3 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

### ***Claim Rejections – 35 U.S.C. § 102***

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in-

(1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effect under this subsection of a national application published under section 122(b) only if the international application designating the United States was published under Article 21(2)(a) of such treaty in the English language; or

(2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that a patent shall not be deemed filed in the United States for the purposes of this subsection based on the filing of an international application filed under the treaty defined in section 351(a).

4. Claims 1-2 are rejected under 35 U.S.C 102(b) as being anticipated by Yabe

[U.S. Patent #6,046,956].

With respect to claim 1, Yabe disclose a method of deactivating a word line in a memory circuit, said method comprising: activating a plurality of word lines either one at a time, simultaneously in subpluralities, combination thereof, or all simultaneously, all said word lines being active concurrently; and deactivating one of said word lines, the other of said word lines remaining active. See Abstract and column 1. In the cited sections, Yabe indicated that the activation and deactivation of a particular word line or groups of word lines depends on whether the control signal indicate to the word line driver to select or deselect a particular word line or groups of word lines.

With respect to claim 2, Yabe disclose that a particular word line or groups of word lines can be activated and deactivated. As noted above, Yabe discloses, in the Abstract and column 1, that the activation and deactivation of a particular word line or groups of word lines depends on whether the control signal indicate to the word line driver to select or deselect a particular word line or groups of word lines.

### ***Remarks***

5. Applicant's arguments filed February 8, 2006 have been fully considered but they are not persuasive.

Applicant argued that the Yabe reference does not disclose a memory wherein a plurality of word lines are all being activated concurrently, but rather a memory that activates only one word line. Additionally, Applicant cited column 2, lines 18-22 as the support for the indication that only one word line is activated at one time. On the

contrary, the Examiner strongly believes that the Applicant totally misread the cited reference – particularly to the cited section that was cited in support for the interpretation that “only” one word line is activated at a time. The Examiner directs the Applicant to the last paragraph of column 1. In that particular section, Yabe specifically indicated that figure 3 is merely a simplification of an actual circuit, which should contain more than one word line. Further, one of ordinary skill in the art would recognize that circuit 13 and memory cell array 11, in figure 2, should contain more than a word line and a memory cell. Furthermore, the Examiner directs the Applicant to the last paragraph of column 9 and the first paragraph of column 10. In the cited section, Yabe clearly indicates that there exists a possibility of activating more than one word line – “32 word lines are activated at a time”.

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for response to this final action is set to expire THREE MONTHS from the date of this action. In the event a first response is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event will the statutory period for response expire later than SIX MONTHS from the date of this final action.

***Allowable Subject Matter***

6. Claims 4-33 are allowable over the prior art of record.

7. The following is an Examiner's statement of reasons for the indication of allowable subject matter: the prior art of records does not show (in addition to the other elements in the claim) the following:

- Receiving a subsequent pulse of said signal, said subsequent pulse having the same logical value as said first pulse; and deactivating said word line in response to said receiving a subsequent pulse.
- Deactivating only said word line in response to receiving said second signal, a fourth signal, and a subsequent pulse of said third signal, said pulse and said subsequent pulse having the same logical value.
- Generating a sequential series of signal pulses, each said pulse operative to activate a word line and having the same logical value; deactivating only said one selected word line in response to one of said signal pulses.
- A memory chip coupled to said memory controller, said memory chip comprising an array of memory cells, word lines, address decoder logic, and a latch circuit that outputs a signal indicating activation of a word line in response to receiving a first signal pulse of an activate signal and that outputs a signal indicating deactivation of said word line in response to receiving a deactivate-enable signal and a subsequent signal pulse of said activate signal.

- Means for deactivating only said word line in response to receiving said second signal, a fourth signal, and a subsequent pulse of said third signal, said subsequent pulse having the same logical value as said pulse.
- Deactivating comprises deactivating one of said word lines in response to receiving a signal pulse, the other of said word lines remaining active, other pulses of said signal used to activate said word lines.
- Selecting a subplurality of word lines to be deactivated, said subplurality consisting of less than all of said activated plurality of word lines; receiving a subsequent pulse of said signal; and deactivating said subplurality of word lines in response to said receiving a subsequent pulse.
- Receiving a subsequent activate signal pulse after said activating; and deactivating only said word line corresponding to said one address signal in response to said receiving a subsequent activate signal pulse.

### ***Conclusion***

8. When responding to the Office action, Applicants are advised to provide the Examiner with line and page numbers of the application and/or references cited to assist the Examiner in the prosecution of this case.

9. Any inquiry concerning this communication or earlier communications from the Examiner should be directed to Michael T. Tran whose telephone number is (571) 272-1795. The Examiner can normally be reached on Monday-Thursday from 7:30-6:00 P.M.

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10. Any inquiry of a general nature or relating to the status of this application should be directed to the Group receptionist whose telephone number is (571) 272-1650.



Michael T. Tran

Art Unit 2827

April 7, 2006

**MICHAEL TRAN**  
**PRIMARY EXAMINER**